EXHIBIT E

Meeting Abstract | April 2014

One Year Follow-Up Report on the rAAV.sFlt-1 Phase I Gene Therapy Trial for Exudative Age-Related Macular Degeneration

Elizabeth P Rakoczy; May Lai; Aaron L Magno; Martyn French; Thomas Walter Chalberg; Mark Blumenkranz; Steven D Schwartz; Ian J Constable

+ Author Affiliations & Notes

Investigative Ophthalmology & Visual Science April 2014, Vol.55, 1309. doi:

Abstract

Purpose: To assess the safety of subretinal injection of rAAV.sFlt-1 in exudative or "wet" AMD patients at one year post-treatment.

Methods: 8 patients were enrolled with 2 in the control group. 6 subjects received rAAV.sFlt-1 (3 low dose: 10E10 vg and 3 high dose: 10E11 vg), via subretinal injection. Laboratory tests included hematology, renal and hepatic function, electrolytes, urine protein and IgM, IgG, IgA and lymphocyte subset analysis, anti-AAV antibodies, neutralising antibodies, and ELISPOT . Ophthalmic safety was assessed by biomicroscopy, IOP, indirect ophthalmoscopy, SD OCT, CFP and FA.

Results: Subjects with prior neutralizing antibodies to AAV (50% inhibition at serum dilution >1:20) were not excluded. A majority (5/6) of subjects were sero-negative (<1:20) at baseline. One subject showed an increase in neutralizing antibodies at day 21; otherwise, neutralizing antibody levels remained unchanged during the course of the study. Clinical laboratory assessments, including blood biochemistry, complete blood count and lymphocyte subsets, remained without any significant change from baseline. There was no evidence of loss of visual acuity, intraocular pressure elevation, retinal detachment, or intraocular or systemic inflammation in

EXHIBIT E

any patients as of the last study visit.SD OCT demonstrated the decrease or lack of fluid in the retina of all patients. Average center point thickness was 552 + 132 um at baseline and decreased to 352 + 68 um at 1 year. The average visual acuity was 41.8 EDTRS letters at baseline, which increased to 49.3 letters at one year. There was no correlation between efficacy and the presence of neutralizing antibodies. None of the patients showed signs of choroidal or retinal atrophy associated with the drug. A majority of subjects had been extensively pre-treated with ranibizumab, with an average of 18 anti-VEGF injections before enrollment. During the one year follow up period, subjects were allowed retreatment with ranibizumab according to strict, masked re-treatment criteria; out of a possible 72 injections, 2 rescue injections were given. Control subjects received 10X as many retreatments during the criteria-driven PRN period.

Conclusions: These results suggest that subretinal rAAV.sFlt-1 injection is safe, and well tolerated by the elderly study population, and that previous or concurrent ranibizumab injections do not interfere with safety.

Keywords: 538 gene transfer/gene therapy • 412 age-related macular degeneration • 453 choroid: neovascularization